

## Division of Molecular Epidemiology

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### General Summary

Despite having the same disease diagnosis, some patients may be cured, but some may not. This difference cannot be understood with experimental medicine. On the other hand, clinical practice might also not provide the answer. We combined molecular biology and epidemiology to create the Division of Molecular Epidemiology, to clarify the etiology of disease, and to predict factors affecting survival.

### Research Activities

#### *The Jikei clinical research course*

We held 20 seminars about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2014, small-group study courses targeting postgraduate students will be started from the principles of epidemiology and biostatistics by reading textbooks and by analyzing real clinical data with STATA software (StataCorp LP, College Station, TX, USA) and designing clinical studies. Our goal is for postgraduate students to develop the skills to construct hypotheses, design protocols, monitor trials, and analyze data.

#### *Original studies*

1. Randomized trial of vitamin D supplement
2. Genome and epigenome clinical studies and lead findings
3. Elective class of global health
4. Randomized trial to prevent food allergy

### Publications

**Mafune A, Hama T, Suda T, Suzuki Y, Ikegami M, Sakanashi C, Imai S, Nakashima A, Yokoo T, Wada K, Kojima H, Urashima M.** Homozygous deletions of UGT2B17 modifies effects of smoking on TP53-mutations and relapse of head and neck carcinoma. *BMC Cancer*. 2015; **15**: 205.

**Takahashi GI, Otori Y, Urashima M, Kuwayama Y; for Quality of Life Improvement Committee.** Evaluation of quality of life in Japanese glaucoma patients and its relationship with visual function. *J Glaucoma*. 2015 Mar 30. Epub ahead of print.

**Kobayashi N, Murayama Y, Yuki I, Ishibashi T, Ebara M, Arakawa H, Irie K, Takao H, Kajiwara I, Nishimura K, Karagiozov K, Urashima M.** Natural course of dissecting vertebral artery aneurysms without stroke. *AJNR Am J Neuroradiol*. 2014; **35**: 1371-5.

**Okamoto A, Sehoul J, Yanaihara N, Hirata Y,**

**Braicu I, Kim BG, Takakura S, Saito M, Yanagida S, Takenaka M, Yamaguchi N, Morikawa A, Tanabe H, Yamada K, Yoshihara K, Enomoto T, Itamochi H, Kigawa J, Matsumura N, Konishi I, Aida S, Aoki Y, Ishii N, Ochiai K, Akiyama T, Urashima M.** Somatic copy number alterations associated with Japanese or endometriosis in ovarian clear cell adenocarcinoma. *PLoS One*. 2015; **10**: e0116977.

**Hirata Y, Murai N, Yanaihara N, Saito M, Saito M, Urashima M, Murakami Y, Matsufuji S, Okamoto A.** MicroRNA-21 is a candidate driver gene for 17q23-25 amplification in ovarian clear cell carcinoma. *BMC Cancer*. 2014; **14**: 799.

**Urashima M, Mezawa H, Noya M, Camargo CA Jr.** Effects of vitamin D supplements on influenza A illness during the 2009 H1N1 pandemic: a randomized controlled trial. *Food Funct*. 2014; **5**: 2365-70.